

LIST OF U.S. CUSTOMS LABORATORY METHODS

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ICUMSA GS 1/2/3-1 Polarisation of Raw Sugar

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to measure the optical rotation of the normal solution of raw sugar as described by Additional U.S. Notes 1 to this chapter.

2 REFERENCE

ICUMSA GS 1/2/3-1
The Determination of the Polarisation of Raw Sugar by Polarimetry

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ICUMSA GS 2/3-1 Polarisation of White Sugar

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to measure the optical rotation of the normal solution of white sugars and other refined white sugar products.

2 REFERENCE

ICUMSA GS 2/3-1

The Braunschweig Method for the Polarisation of White Sugar by Polarimetry

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AOAC 925.46
Sucrose in Sugars and Sirups
Polarimetric Methods

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

**1 SCOPE AND FIELD OF
APPLICATION**

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to determine the optical rotation of sucrose in sirups.

2 REFERENCE

AOAC 925.46
Sucrose in Sugars and Sirups
Polarimetric Methods

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AOAC 925.47

Sucrose in Sugars and Sirups

Polarimetric Method Before and After Inversion with Invertase

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to determine sucrose in the presence of other carbohydrates.

2 REFERENCE

AOAC 925.47

Sucrose in Sugars and Sirups
Polarimetric Method Before and After
Inversion with Invertase

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AOAC 925.48 **Sucrose in Sugars and Sirups** **Polarimetric Method Before and After Inversion with** **Hydrochloric Acid**

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to determine sucrose in the presence of other carbohydrates.

2 REFERENCE

AOAC 925.48

Sucrose in Sugars and Sirups
Polarimetric Method Before and After
Inversion with hydrochloric Acid

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AOAC 948.07 Caramel in Wine

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to determine the moisture loss in sugar by drying.

2 REFERENCE

AOAC 948.07
Caramel in Wine

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ICUMSA GS 2/1/3-15 Sugar Moisture by Loss on Drying

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to determine the moisture loss in sugar by drying.

2 REFERENCE

ICUMSA GS 2/1/3-15
Sugar Moisture by Loss on Drying

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ICUMSA GS 7-23

Sucrose, Glucose and Fructose in Cane Molasses by HPLC

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to determine the amounts of sucrose, glucose and fructose in cane molasses by HPLC.

2 REFERENCE

ICUMSA GS 7-23

Sucrose, Glucose and Fructose in
Cane Molasses by HPLC

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AOAC 984.22 **Purity of Lactose** **Liquid Chromatographic Method**

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to determine the amount of lactose found in sugar confectionery products.

2 REFERENCE

AOAC 984.22
Purity of Lactose
Liquid Chromatographic
Method

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ICUMSA GS 4/7-11 **Dry Substance and Moisture in Molasses by Vacuum** **Oven Drying on Sand**

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to determine the solid content or the moisture content in molasses by drying.

2 REFERENCE

ICUMSA GS 4/7-11

Dry Substance and Moisture in
Molasses by Vacuum Oven Drying
on Sand

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ICUMSA GS 4-13 Refractometric Dry Substance (RDS%) of Molasses

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to determine the refractometric Brix of molasses.

2 REFERENCE

ICUMSA GS 4-13
Refractometric Dry Substance
(RDS%) of Molasses

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AOAC 932.14 C Solids in Sirups

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to determine the refractometric Brix of molasses.

2 REFERENCE

AOAC 932.14 C
Solids in Sirups

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ICUMSA GS 4/7-1 Apparent Sucrose in Molasses by a Double Polarisation Method

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to determine sucrose in molasses.

2 REFERENCE

ICUMSA GS 4/7-1

Apparent Sucrose in Molasses by a Double Polarisation Method

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ICUMSA GS 3/5/7/8-3 Sucrose by Gas Chromatography (GC) in Factory Products

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is one that can be used to determine the sucrose content by means of gas chromatography.

2 REFERENCE

ICUMSA GS 3/5/7/8-3

The Determination of Sucrose by Gas Chromatography (GC) in Factory Products and Cane Juice

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ICUMSA GS 4/3-3 **Reducing Sugars in Cane Molasses by the** **Lane & Eynon Constant Volume Procedure**

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to determine the amount of reducing sugars in molasses and certain refined sirup products.

2 REFERENCE

ICUMSA GS 4/3-3

The Determination of Reducing Sugars in Cane Molasses and Certain Refined Syrups by the Lane & Eynon Constant Volume Procedure

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AOAC 968.28

Total Sugars in Molasses as Invert Sugar Lane-Eynon Constant Volume Volumetric Method

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to determine the total sugar content in molasses calculated as inverted sugar.

2 REFERENCE

AOAC 968.28

Total Sugars in Molasses as Invert Sugar
Lane-Eynon Constant Volume
Volumetric Method

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ICUMSA GS 4/3-7 **Total Reducing Sugars in Molasses After Hydrolysis** **by the Lane & Eynon Constant Volume Procedure**

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to determine the total sugar content in molasses calculated as inverted sugar.

2 REFERENCE

ICUMSA GS 4/3-7

Total Reducing Sugars in Molasses
After Hydrolysis by the Lane & Eynon
Constant Volume Procedure

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ICUMSA GS 4/3-9 **Total Reducing Sugars in Molasses After Hydrolysis** **of the Luff Schoorl Procedure**

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used to determine the total reducing sugar content in molasses.

2 REFERENCE

ICUMSA GS 4/3-9

Total Reducing Sugars in Molasses
After Hydrolysis of the Luff Schoorl
Procedure

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ICUMSA GS 4-5 Reducing Sugars in Beet Molasses by the Lane & Eynon Constant Volume Procedure

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Chapter 17 of the Harmonized Tariff Schedule of the United States (HTSUS) covers sugars and sugar confectionery products. This method is used in the determination of reducing sugars in beet molasses. It is applicable to a sample containing less than 5% reducing sugars.

2 REFERENCE

ICUMSA GS 4-5
Reducing Sugars in Beet Molasses
by the Lane & Eynon Constant
Volume Procedure